



National Action Plan for Energy Efficiency

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Implementing the National Action Plan for Energy Efficiency

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Southeast Implementation Meeting

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National Action Plan for Energy Efficiency

- Energy efficiency and today's energy challenges
- National Action Plan overview



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Today's Energy Challenges

- **Energy demand is growing**
- **Aging infrastructure**
- **Rising utility bills**
- **Increasing generation costs**
 - Gas and coal prices
 - Building cleaner generation
- **Reliability issues**
- **Natural gas prices increasing / volatile**
- **Carbon risk**
- **Pending large transmission and generation investments in uncertain investment world**



Energy Efficiency is a Key Part of the Solution

- Environmental
 - Lower carbon emissions and criteria pollutants
 - Lower water use
- Economic
 - Savings to customers
 - Lower cost (about half) compared to new G&T
 - Downward pressure on natural gas prices and volatility
 - Improved local economy, using local labor
 - Benefits low-income, seniors
- Utility System Benefits
 - Near-term tool with persistent, long-term benefits
 - Improved security of systems
 - Lower baseload and peak demand
 - Reduce need for “hard to site” G&T assets
 - Targeted, modular, manageable
- Risk Management
 - Diversifies utility resource portfolios
 - Zero carbon emissions

Quick, cheap, and clean resource



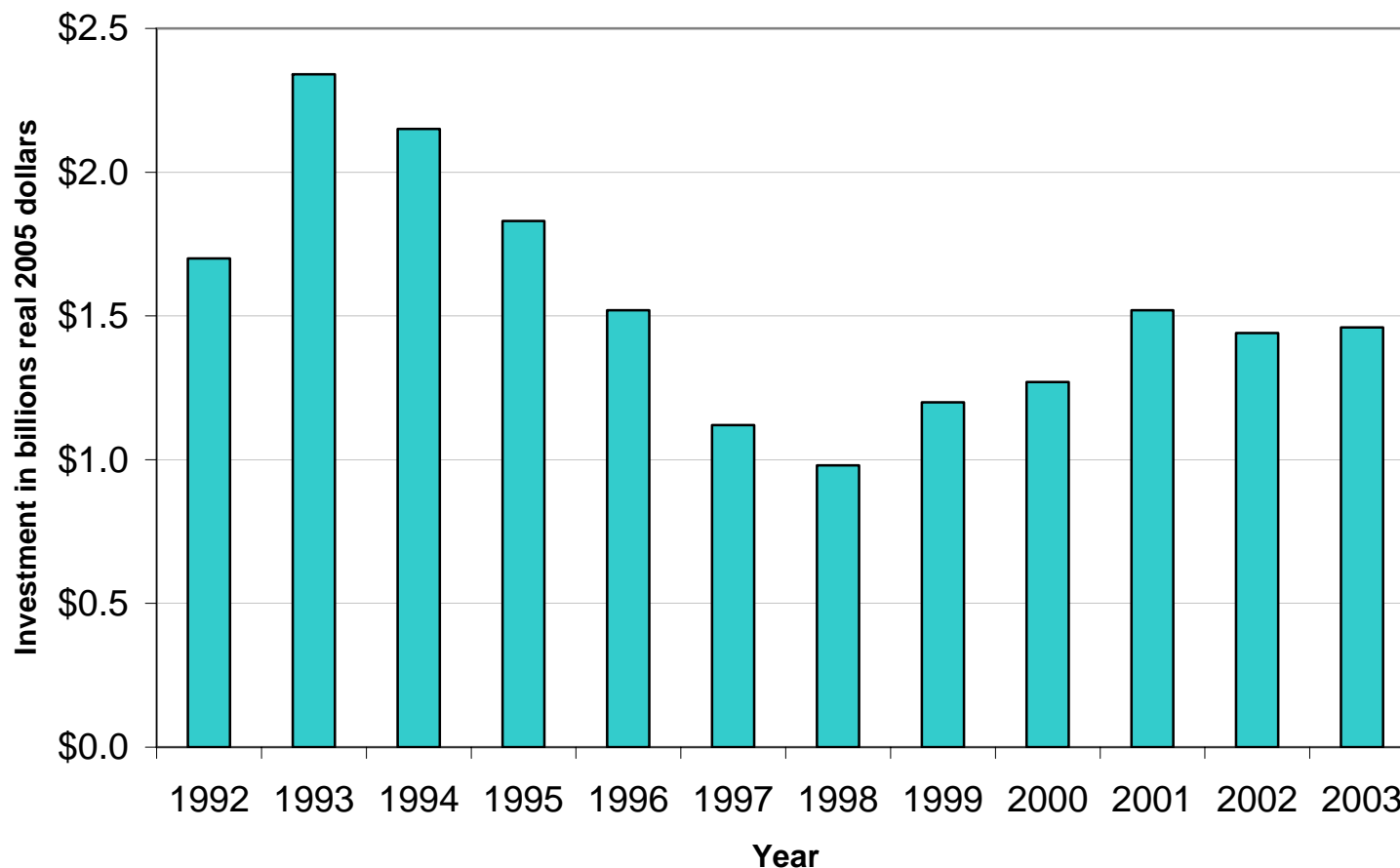
Large Potential for Cost-Effective Energy Efficiency

- *McKinsey Global Institute's Curbing Global Energy Demand Growth: The Energy Productivity Opportunity (May 07)* - By capturing the potential available from existing technologies with an internal rate of return of 10% or more, we could **cut global energy demand by half or more over the next 15 years**. Collectively, we have the potential to cut global energy demand by 135 quadrillion British thermal units (QBTUs) - the equivalent of 64 million barrels of oil per day, or almost 150 percent of the entire US energy consumption today.
- *ACEEE's Energy Efficiency's Role in a Carbon Cap-and-Trade System (May 06)* - Doubling efficiency would **cut load growth by about two-thirds in 2024**, from about 20% to about 6% above 2006 levels. Under the reference case by 2024, generation would reach around 480,000 GWh and with doubled efficiency it would reach around 430,000 GWh.
- *Report of the Clean and Diversified Energy Advisory Committee to the Western Governors Association (WGA) (June 06)* - By adopting the WGA's best practices scenario in the 18 WGA states, **load growth could be reduced by as much as 75% over the next 15 years** (report published in 2006). The best practices scenario shows that it is possible to reduce electricity consumption in 2020 by 20% relative to that in the reference scenario.



Despite Potential, Utility Sector Energy Efficiency Has Declined

**Annual Spending on Utility Sector Energy Efficiency Programs 1992-2003
(2005 real dollars)**



Source: Data from ACEEE 2005 Scorecard adjusted for inflation using
U.S. Department of Labor Bureau of Labor Statistics Inflation Calculator



Programs Help Overcome Key Barriers Limiting Efficiency

- ENERGY STAR



- Helps homeowners reduce energy use by 10, 20, or 30 percent while purchasing products, undertaking home improvements, or buying a new home
 - Helps businesses, public sector, schools reduce energy use by 10 percent or more
 - Overcomes lack of information, competing vendor claims, split incentives
 - Broad-based platform with government-backed credibility and network of retailers and manufacturers to leverage
- Important utility barriers remain
 - Existing electricity and gas regulations / market rules provide additional financial incentives for supply-side resources
 - View that energy efficiency is not a reliable, measurable, cost effective resource
 - Concern that energy efficiency will raise rates
 - Lack of good documentation and guidance on demand-side programs

Barriers important to address – do not go away with carbon regulation



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National Action Plan for Energy Efficiency

- Released on July 31, 2006 at the National Association of Regulatory Utility Commissioners meeting
- Goal: To create a sustainable, aggressive national commitment to energy efficiency through gas and electric utilities, utility regulators, and partner organizations
- Over 50 member public-private Leadership Group developed five recommendations and commits to take action
- Additional commitments to energy efficiency – exceeds 90 organizations

National Action Plan for Energy Efficiency Recommendations

1. Recognize energy efficiency as a high-priority energy resource.
2. Make a strong, long-term commitment to implement cost-effective energy efficiency as a resource.
3. Broadly communicate the benefits of and opportunities for energy efficiency.
4. Provide sufficient, timely and stable program funding to deliver energy efficiency where cost-effective.
5. Modify policies to align utility incentives with the delivery of cost-effective energy efficiency and modify ratemaking practices to promote energy efficiency investments.



DOE Report to Congress Agrees with Action Plan Recommendations

- Energy Policy Act of 2005 required DOE to conduct a study and then report to Congress on efficiency state & regional policies for utilities
- DOE based its own ten recommendations partly on the Action Plan recommendations
- Action Plan executive summary included as an appendix to DOE report
- “State and Regional Policies that Promote Energy Efficiency Programs Carried Out by Electric and Gas Utilities”, March 2007, www.ee.energy.gov

STATE AND REGIONAL POLICIES THAT PROMOTE ENERGY EFFICIENCY PROGRAMS CARRIED OUT BY ELECTRIC AND GAS UTILITIES

A REPORT TO THE UNITED STATES CONGRESS
PURSUANT TO SECTION 139
OF THE ENERGY POLICY ACT OF 2005



MARCH 2007



U.S. DEPARTMENT OF ENERGY



Leadership Group

- Sets tone and overall direction of the Action Plan
- Released Action Plan Report and Recommendations
- Co-Chaired by:
 - Commissioner Marsha Smith, NARUC First Vice President and Member of Idaho Public Utility Commission
 - Jim Rogers, President and CEO of Duke Energy
- Includes 50 leading electric and gas utilities, state utility commissioners, state air and energy agencies, energy services providers, energy consumers, and energy efficiency and consumer advocates
 - US DOE and US EPA facilitated





The Leadership Group

The Leadership Group includes 30 electric and gas utilities, 18 state agencies, and 13 other organizations:

- Alliance to Save Energy
- American Council for an Energy-Efficient Economy
- Ameren
- American Electric Power
- Arkansas Electric Cooperative Corporation
- Arkansas Public Service Commission
- Austin Energy
- Baltimore Gas and Electric
- Bonneville Power Administration
- California Energy Commission
- California Public Utilities Commission
- Servidyne Systems
- Connecticut Consumer Counsel
- Connecticut Department of Environmental Protection
- Connecticut Department of Public Utility Control
- Delaware General Assembly
- District of Columbia Public Service Commission
- Duke Energy
- Entergy Corporation
- Environmental Defense
- Exelon
- Food Lion
- Great River Energy
- Idaho Public Utilities Commission
- ISO New England Inc.
- Johnson Controls
- Long Island Power Authority
- MidAmerican Energy Company
- Minnesota Public Utilities Commission
- National Grid
- Natural Resources Defense Council
- New Jersey Board of Public Utilities
- New Jersey Natural Gas
- New York Power Authority
- New York State Public Service Commission
- North Carolina Air Office
- North Carolina Energy Office
- Ohio Consumers' Counsel
- Pacific Gas and Electric
- Pepco Holdings, Inc.
- PJM Interconnection
- PNM Resources
- Public Advocate State of Maine
- Puget Sound
- Sacramento Municipal Utility District
- Santee Cooper
- Seattle City Light
- Servidyne Systems
- Southern California Edison
- Southern Company
- Tennessee Valley Authority
- Texas State Energy Conservation Office
- The Dow Chemical Company
- Tristate Generation and Transmission Association, Inc.
- USAA Realty Company
- Vectren Corporation
- Vermont Energy Investment Corporation
- Wal-Mart Stores, Inc.
- Washington Utilities and Transportation Commission
- Waverly Light and Power
- Xcel Energy



Observers

- American Gas Association
- American Public Power Association
- Association of Energy Engineers
- Business Council for Sustainable Energy
- Consortium for Energy Efficiency
- Council of Energy Resource Tribes
- Demand Response Coordinating Committee
- Edison Electric Institute
- Electric Power Research Institute
- Energy Programs Consortium
- Gas Appliance Manufacturers Association
- Gas Technology Institute
- National Association of Energy Service Companies
- National Association of Regulatory Utility Commissioners
- National Association of State Energy Officials
- National Conference of State Legislatures
- National Council on Electricity Policy
- National Electrical Manufacturers Association
- National Rural Electric Cooperative Association
- North American Insulation Manufacturers Association
- Steel Manufacturers Association



Year One Accomplishments

- Reviewed key barriers to energy efficiency and surveyed policies and programs that have overcome these barriers
- Advanced the five (5) Action Plan Recommendations
- Announced over 90 public statements and commitments to advance energy efficiency through the Action Plan Recommendations
- Produced new resources to support commitments
 - National Action Plan for Energy Efficiency Report
 - Energy Efficiency Benefits Calculator
 - Consumer Energy Efficiency Fact Sheet



Commitments to Energy Efficiency

- 99 Action Plan endorsements and commitments made by stakeholders across 49 states
 - State Utility Commissions – **AR**, CA, CT, **FL**, **HI**, IA, KS, MN, NJ, NY, OR, VT, WA, WI
 - Commission Associations – **SEARUC**, WCPSC, NECPUC, MARC
 - Utilities – **Austin Energy**, BPA, **Dominion Virginia Power**, **Duke Energy**, **Entergy**, Exelon, New Jersey Natural Gas, PNM, **Santee Cooper**, **Southern Company**, **United Cooperative Services**, Xcel Energy, etc
 - Other state agencies – OH and CT Consumers' Counsel; CA agencies; CT DEP; HI, MN, and OR energy departments; Governors in CA, IA, OR, and UT
 - ISO-NE and MISO
 - End-users – Dow, Eastman Kodak, **Food Lion**, **Wal-Mart**, etc
 - Additional partner organizations



Commitments to Energy Efficiency (2)

- Include:
 - Establishing state-level collaborative processes to explore how best to increase investment in energy efficiency
 - Investigating increased funding for cost-effective efficiency
 - Conducting formal investigation on ways utilities can remove the link between revenues and sales volume
 - Including energy efficiency on a consistent and comparable basis with supply-side resources in future resource planning activities
 - Meeting energy savings goals within the range of 10-35%
 - Proactively educating consumers on the benefits
- Progress is already being made
 - Success to be released in conjunction with NARUC Annual Meeting in November



Year Two Work Plan

- Assist leading organizations in achieving their commitments—meaningful progress by summer 2007
- Engage more organizations in making commitments
 - Sector Collaborative on Energy Efficiency
- Develop new resources to support implementation of the Action Plan recommendations
- Explore approaches to address demand response
- Outreach on the Action Plan and its progress
 - Regional Implementation Meetings
- Recognize leadership
- Vision for 2025



Sector Collaborative on Energy Efficiency

- An opportunity for utilities and end-users from key sectors to pursue the benefits of energy efficiency by:
 - Exploring barriers to cost-effective energy efficiency
 - Identifying tools for evaluation and implementation of cost-effective energy efficiency
 - Sharing approaches to effective energy efficiency programs
 - Identifying and pursuing new commitments and partnerships to increase investment in energy efficiency
- Sectors: Hospitality, Retail, Commercial Real Estate, Grocers, Cities
- Key findings from June 2007 Meeting
 - Commercial customers looking to utilities for data consistency and assistance with benchmarking building energy use
 - Utilities / customer collaboration valuable to future EE efforts
- Supported by EEI, AGA, EPA, DOE



Resources for States, Utilities and Stakeholders

- Guides and Papers (*Fall 07*)
 - National Action Plan for Energy Efficiency Report
 - Aligning Utility Incentives with Energy Efficiency Investment (*Fall 07*)
 - Resource Planning with Energy Efficiency (*Fall 07*)
 - Conducting Potential Studies for Cost-Effective Energy Efficiency (*Fall 07*)
 - Model Energy Efficiency Program Evaluation (*Fall 07*)
 - National Action Plan Vision for 2025 (*Fall 07*)
- Outreach Material and Tools
 - Energy Efficiency Benefits Calculator
 - Communications Kit (*Fall 07*)
 - Resource and sample docket database (*Fall 07*)
 - Educational Briefings (*Fall 07*)



Resources for States, Utilities and Stakeholders (cont'd)

- Fact Sheets
 - Building Codes and Energy Efficiency
 - Consumer Energy Efficiency
- Regional Implementation Meetings
 - Policy tracking tables
 - Presentations and meeting summaries
- Sector Collaborative on Energy Efficiency
 - Presentations from June 27 and 28 Meeting
 - Background Paper on Utility Data Availability
 - Energy Consumption Profiles for participating sectors



Assistance is Available to Help Advance Action Plan Commitments

- Leadership Group and other organizations will:
 - Conduct peer-to-peer information sharing and support
 - Provide education and outreach per their commitments
- DOE/EPA will:
 - Continue to facilitate the Action Plan process, including support for new resources and activities
 - Provide technical assistance to state policy makers and utilities (expanding existing efforts)
 - Share free resources from the ENERGY STAR, buildings, and clean energy programs to utilities and states



For More Information

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